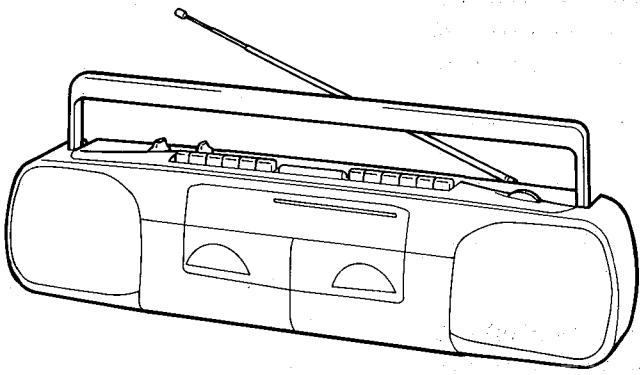
CFS-W303L

SERVICE MANUAL

AEP Model
UK Model



CABINET COLOR : WHITE, BLACK, RED

Tape Transport Mechanism Type	MF-W303PB-75D (DECK A)
	MF-W303RP-75D (DECK B)

SPECIFICATIONS

Tuner frequency range

Sales area	FM	MW	LW	SW
Europe (incl. U.K.)	87.6-107MHz	531-1602kHz	153-281kHz	5.95-18MHz
Italy	87.5-108MHz	526.5-1606.5kHz	148.5-283.5kHz	
IF	10.7MHz	455kHz	455kHz	455kHz

Frequency response 80Hz-10,000Hz
Speakers 10cm (4 in.) dia. full range × 2
Output Headphones jack (stereo minijack) for 16-68 ohm impedance headphones
Maximum power output 4.6W (2.3W + 2.3W)
Power requirements

	Requirements (supplied AC power adaptor)
United Kingdom model	240V AC, 50Hz
Continental European model	220V AC, 50Hz

9V DC, six R20 (size D) batteries
Power consumption

United Kingdom model	20W
Model for other countries	14W

Battery life

Batteries	FM recording
Sony SUM-1 (NS)	Approx. 13 hours
Sony AM1 alkaline	Approx. 19.5 hours

Dimensions Approx. 566 × 148 × 150mm (w/h/d) (22⅜ × 5⅞ × 6 inches) incl. projecting parts and controls, not incl. handle
Weight Approx. 3.5kg (7 lb 11 oz) incl. batteries
Accessory supplied AC power cord (1)
Optional accessories Sony "MDR" headphone series

Note
This appliance conforms with EEC Directives 76/889 and 82/499 regarding interference suppression.

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MICROFILM

RADIO CASSETTE-CORDER

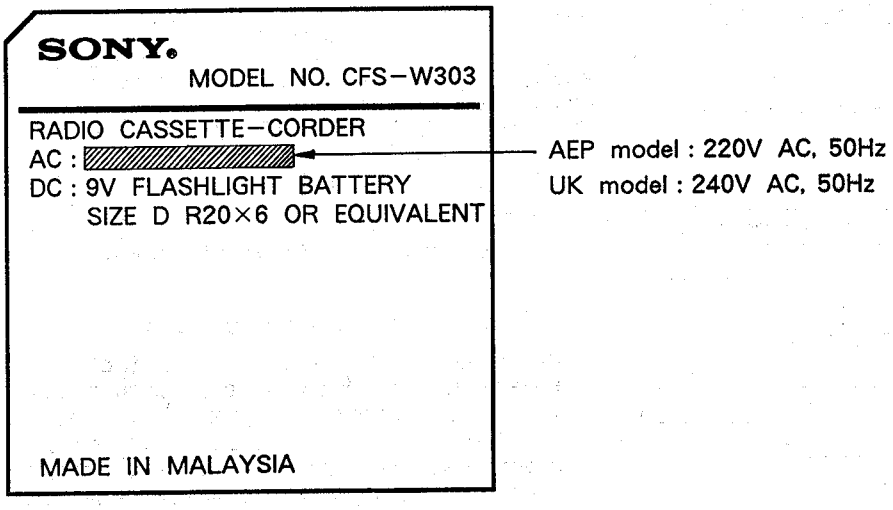
SONY®

TABLE OF CONTENTS

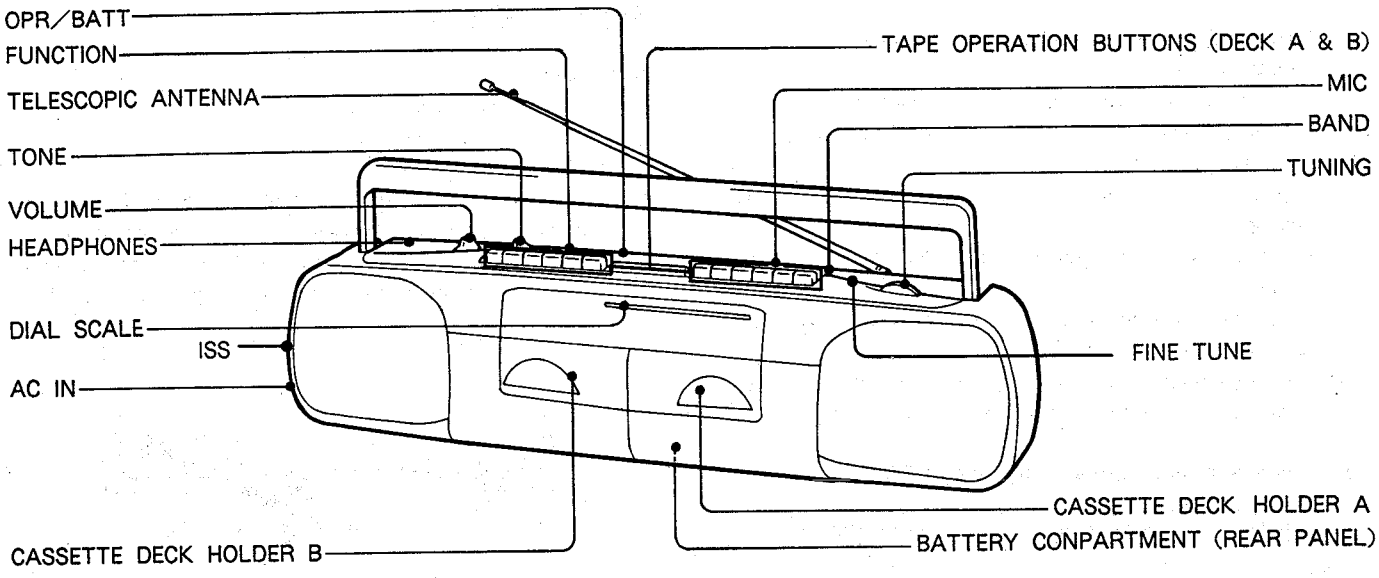
Section	Title	Page
	Specifications	1
	Safety Check-Out	2
	Model Identification	2
	Location and Function of Controls	3
1.	DIAL POINTER INSTALLATION	3
2.	MECHANICAL ADJUSTMENTS	4
3.	ELECTRICAL ADJUSTMENTS	5
4.	DIAGRAMS	
	4-1. Printed Wiring Boards (Tuner Section)	9
	4-2. Schematic Diagram (Tuner Section)	10
	4-3. Printed Wiring Boards (Audio Section)	12
	4-4. Schematic Diagram (Audio Section)	15
5.	EXPLODED VIEWS	18
6.	ELECTRICAL PARTS LIST	22

MODEL IDENTIFCATION

-Model Number Label-



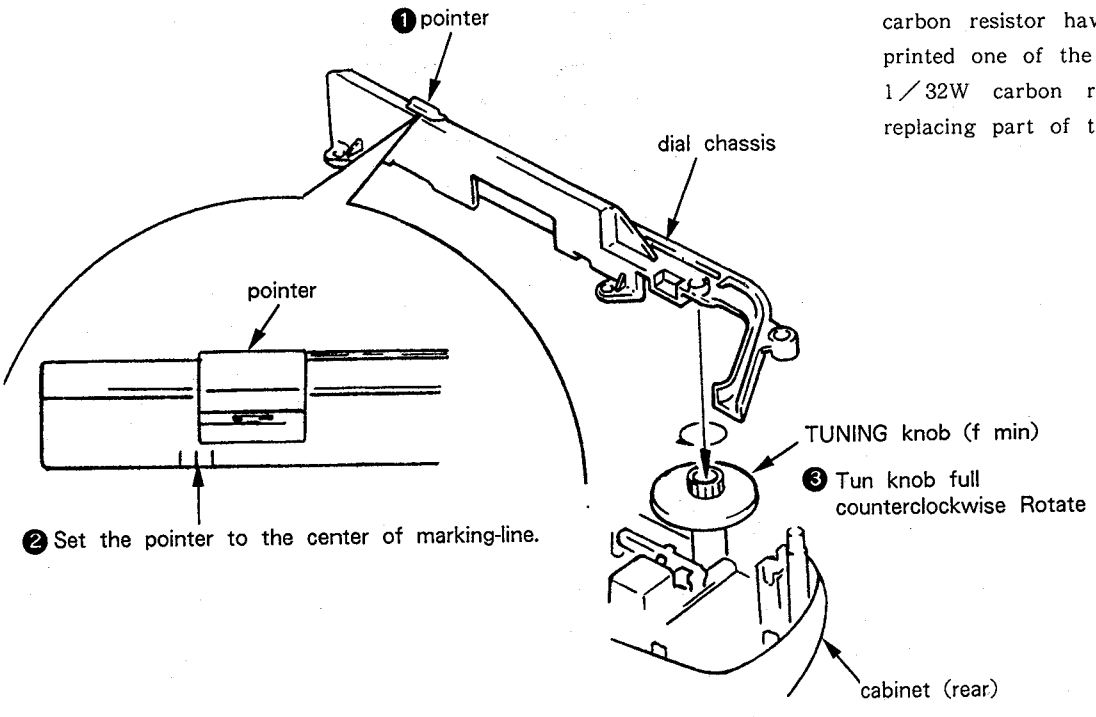
LOCATION AND FUNCTION OF CONTROLS



SECTION 1

DIAL POINTER INSTALLATION

Note : follow the disassembly procedure in the numerical order given.



SERVICE NOTE

- **Repairing printed resistor**

  Cut both sides of the resistor and solder the carbon resistor having same value in place of printed one of the conductor side.

  1/32W carbon resistor is supplied for the replacing part of the printed resistor.

SECTION 2
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head　　Pinch roller
   erase head　　rubber belts
   capstan　　idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

2-1. Torque Measurement (DECK-A/DECK-B)

Torque	Torque meter	Meter reading
FWD	CQ-102D	25−50g·cm (0.35−0.7oz·inch)
FWD Back Tension		2−5g·cm (0.03−0.07oz·inch)
FF	CQ-201B	65−110g·cm (0.9−1.53oz·inch)
REW		65−110g·cm (0.9−1.53oz·inch)

Tape Tention Measurement

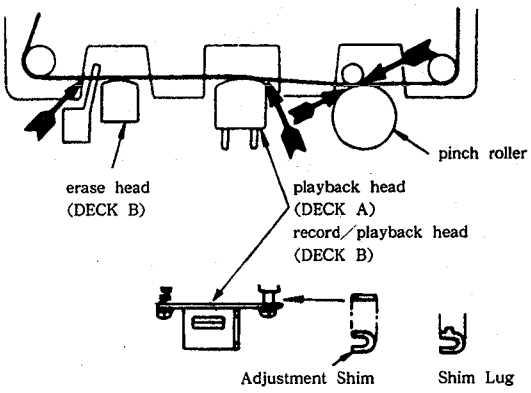
Mode	Torque meter	Meter reading
FWD	CQ-403	more than 170g (more than 6oz)

2-2. Head Height Adjustment

DECK-A/DECK-B

Procedures :

1. DECK-A : playback mode
   DECK-B : record mode
2. Test Cassette : CQ-009C
3. Viewing from the front, adjust the head heights to eliminate tape curl and tape twist at portions of arrow. If a satisfying result is not provided with only turning the screws, change the adjustment shim or the shim lug.



Adjustment Shim

3−578−138−01 (t=0.1)
3−578−138−11 (t=0.2)
3−578−138−21 (t=0.3)

Shim Lug

3−331−108−01 (t=0.1)
3−331−108−11 (t=0.2)
3−331−108−21 (t=0.3)
3−331−108−31 (t=0.4)
3−331−108−41 (t=0.5)

SECTION 3
ELECTRICAL ADJUSTMENTS

3-1. TAPE RECORDER SECTION

1. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
2. The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.
  FUNCTION ····· TAPE (RADIO OFF)
  VOLUME ····· MIN
- Standard Record :
  Deliver the standard input signal level to the input jack and set the VOLUME control to obtain the standard output signal level.

• Standard Input Level

Input terminal	MIX MIC	LINE IN
Source impedance	300 Ω	10k Ω
Input level	3.88mV (−46dB)	0.43V (−5dB)

• Standard Output Level

Output terminal	PHONES	Speaker SP901,902
Load impedance	32 Ω	3.2 Ω
Output level	0.25V (−10dB)	0.775V (0dB)

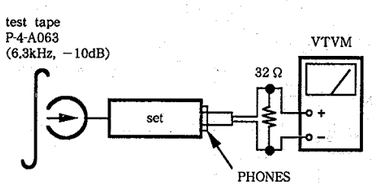
Test tape

Type	Signal	Used for
P-4-A063	6.3kHz, −10dB	Azimuth Adjustment
WS-48A	3kHz, 0dB	Tape Speed Adjustment

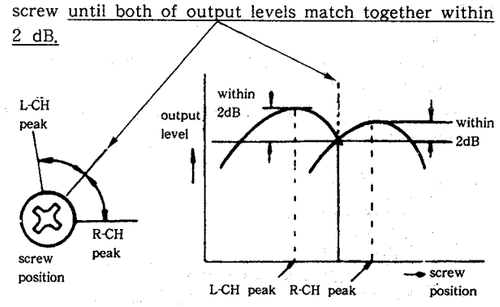
3-1-1. Record/playback Head Azimuth Adjustment
DECK-A/DECK-B

Procedure :

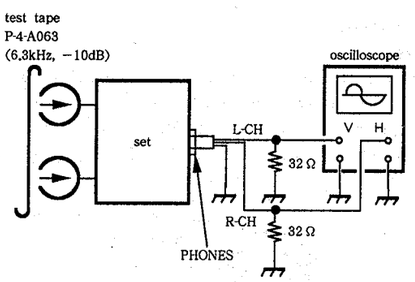
1. Mode : playback

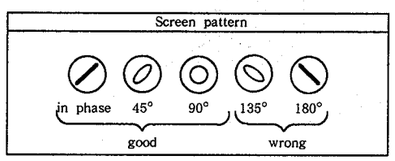


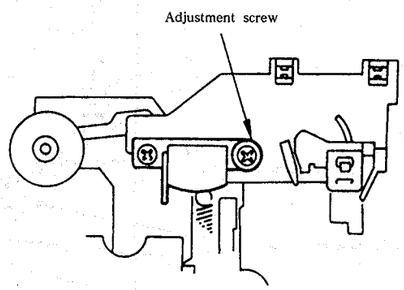
2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2 dB.



3. Phase Check
Mode : playback



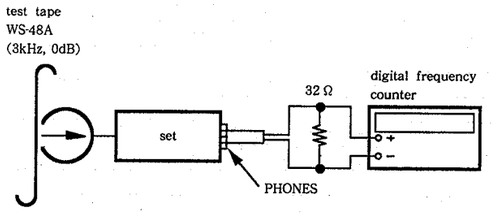




3-1-2. Tape Speed Adjustment
DECK-A/DECK-B

Procedure :

Mode : playback

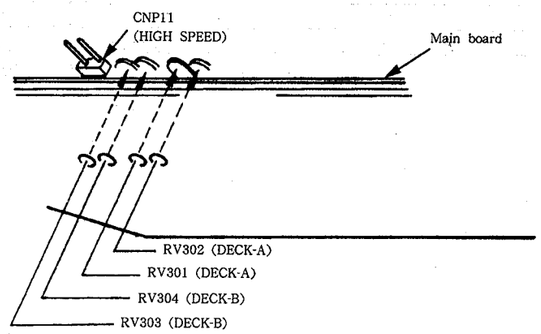


1. Short the CNP11. (It results in high speed mode.)
2. Insert WS-48A in deck and put into playback mode.
3. Adjust adjustment element for the specified reading on the frequency counter.
   Adjustment element :
   DECK-A ·····RV302
   DECK-B·····RV304
4. Open CNP11 in step 1.(It results in normal speed mode.)
5. Insert WS-48A in deck and put into playback mode.
6. Adjust adjustment element for the specified reading on the frequency counter.
   Adjustment element :
   DECK-A ·····RV301
   DECK-B·····RV303

Specification (in the middle of the tape)

Speed mode	Frequency counter
High speed	5,970±15Hz
Normal speed	3,000 $^{+0}_{-2,970}$ Hz

Frequency difference between the beginning and the end of the tape should be within 1.5%.



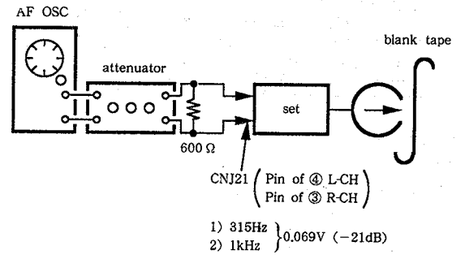
3-1-3. Record Bias Adjustment
DECK-B

Setting :

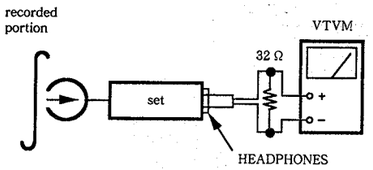
TONE : mechanical mid
FUNCTION : RADIO
Open the connector, CNP21 of tuner board.

Procedure :

1. Mode : record



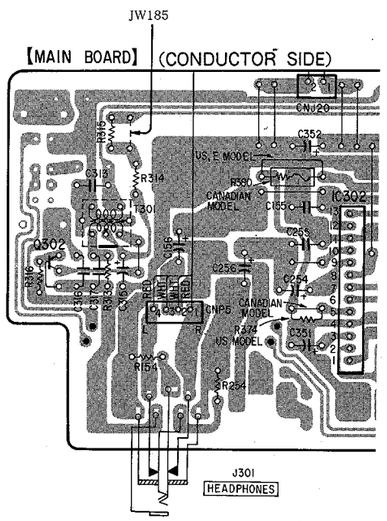
2. Mode : playback



Confirm that the 1kHz playback signal level is −10dB relative to the 315Hz signal.
If necessary, adjust by connecting or disconnecting JW185.
Repeat the procedures in each adjustment several times.
After adjustment, connecting CNP21.

Pattern connection	1kHz VTVM reading
disconnected (R315 out)	up
connected (R315 in)	down

Adjustment Location : main board

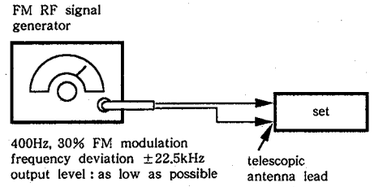


3-2. RADIO SECTION

• FM Section

Setting :

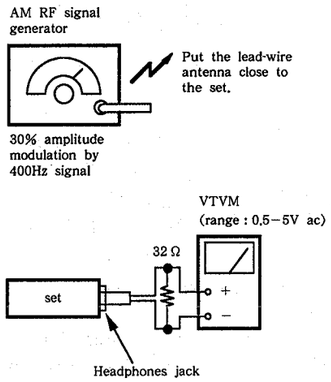
FUNCTION switch : FM



• AM Section

Setting :

FUNCTION switch : AM



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2	CT2
87.35MHz	107.8MHz (108.25MHz)

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L1	CT1
87.35MHz	107.8MHz (108.25MHz)

MW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	CT4
520kHz (516kHz)	1,680kHz (1,630kHz)

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	CT3
600kHz	1,400kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on VTVM.
T1
455kHz

LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L8	CT8
140kHz	293kHz

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L7	CT7
160kHz	260kHz

SW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L6	CT6
5.8MHz	18.4MHz

SW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L5	CT5
5.8MHz	18.4MHz

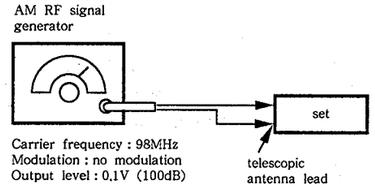
( ) : Italian Model

VCO Adjustment

A) Regular Method

Procedure :

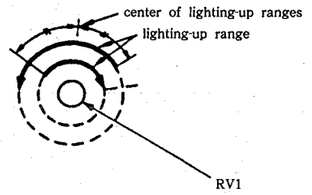
1. Connect frequency counter to it as shown Fig-1.
2. Tune the set to 98MHz.
3. Adjust RV1 for 76kHz±500Hz reading on the frequency counter.



B) Simple Method

Procedure :

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RV1 clockwise or counterclockwise and memorize the lighting-up range of the FM STEREO lamp.
3. Secure RV1 at the center of the lighting-up range of both turns as shown below.



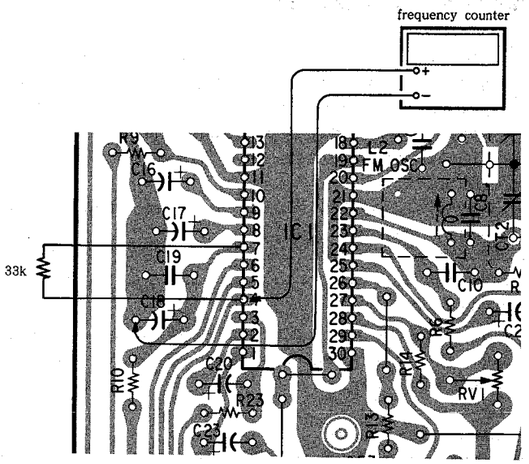
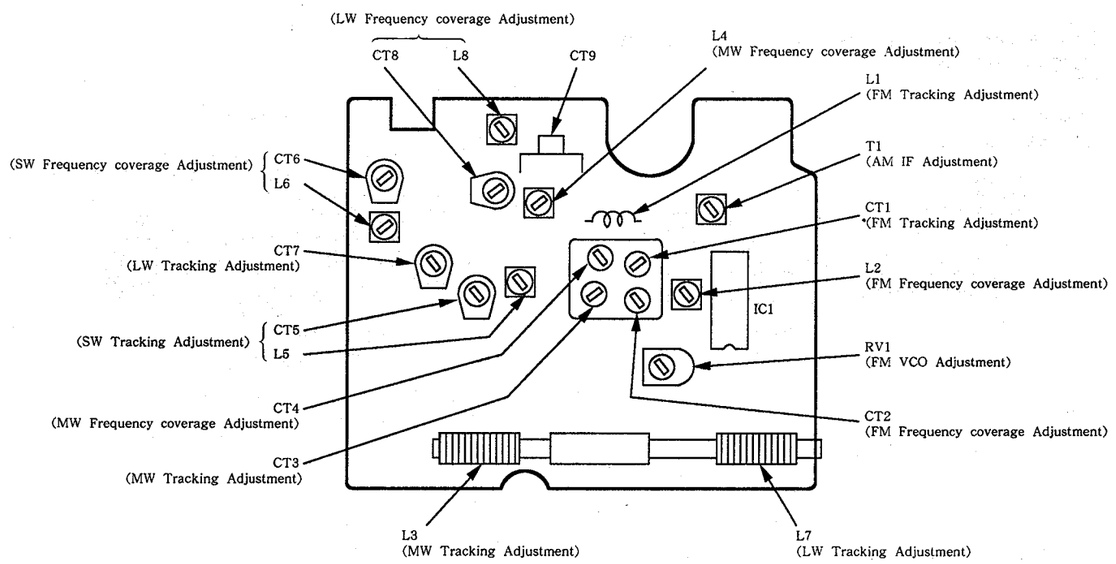
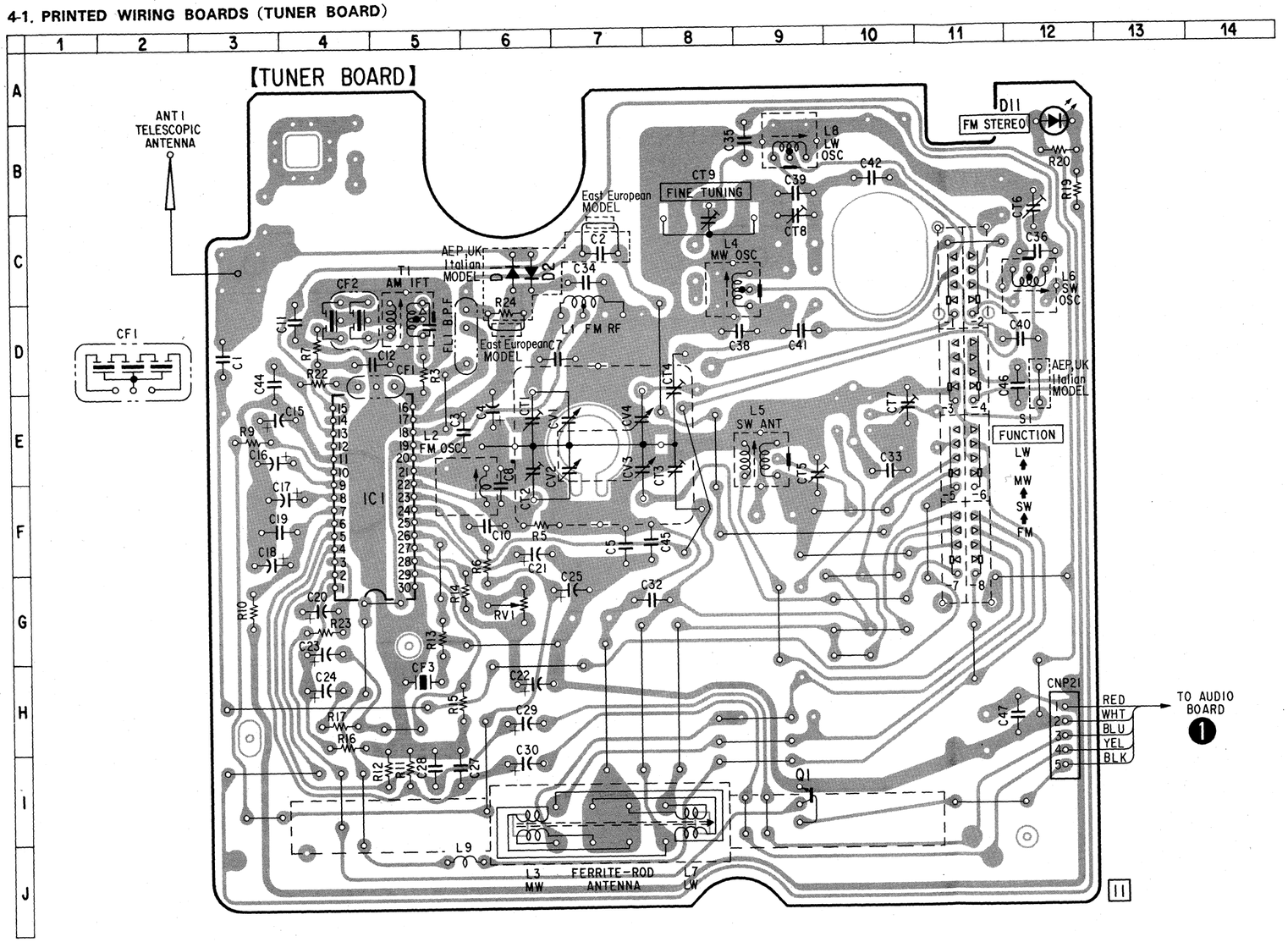


Fig-1.



SECTION 4
DIAGRAMS

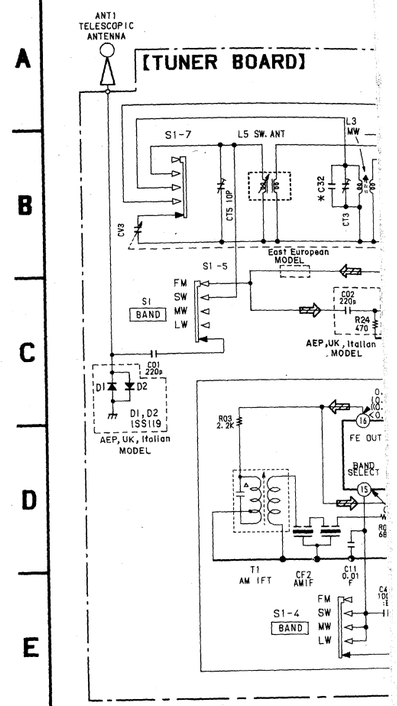
4-1. PRINTED WIRING BOARDS (TUNER BOARD)



Note :

- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- [ ]← indicates side identified with part number.

4-2. SCHEMATIC DIAGRAM (TUNER BC



● **SEMICONDUCTOR LOCATION**

Ref.No.	Location
IC1	H-5
D11	B-7

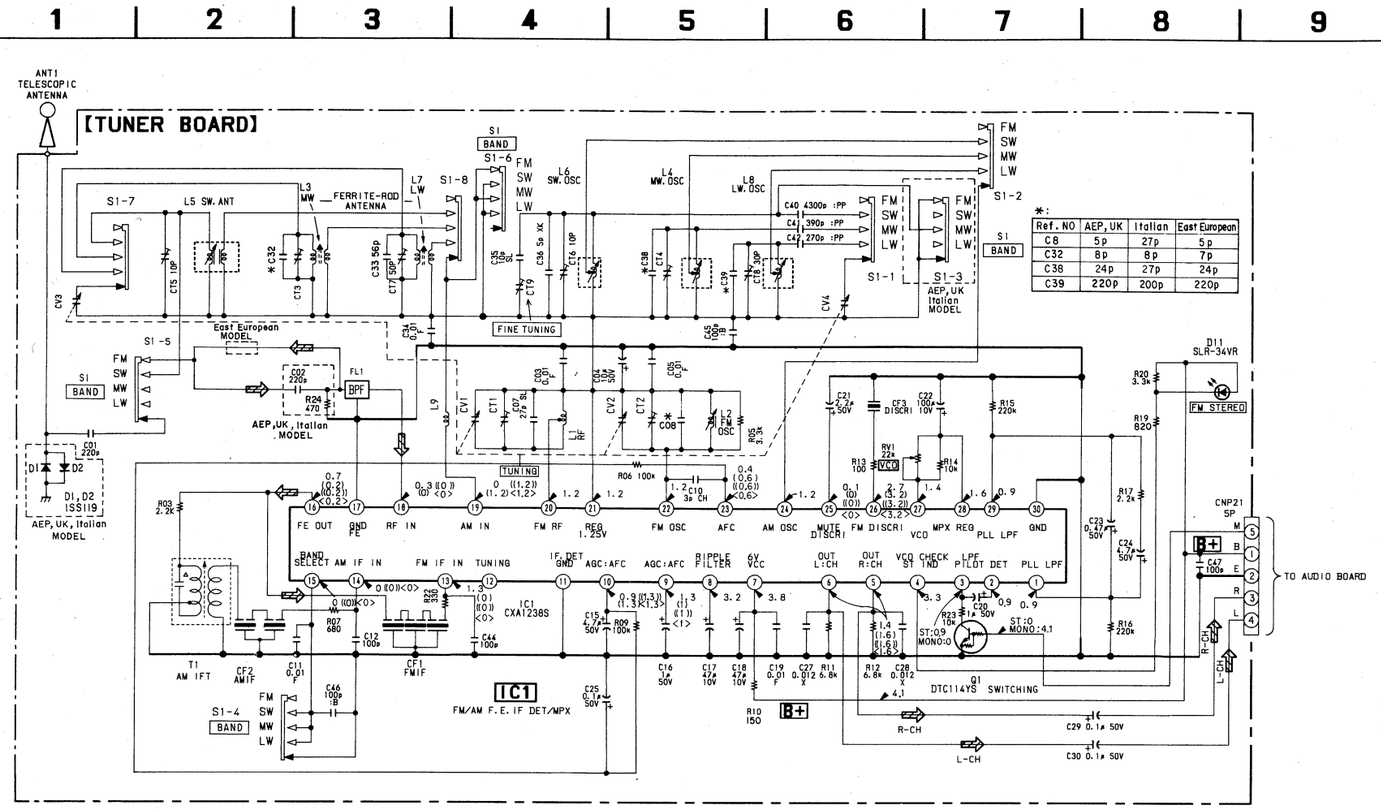
Semiconduct

CXA1

(Top vi

SLR-34VF

4-2. SCHEMATIC DIAGRAM (TUNER BOARD)



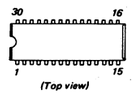
*:				
Ref. NO	AEP, UK	Italian	East European
C8	5p	27p	5p
C32	8p	8p	7p
C38	24p	27p	24p
C39	220p	200p	220p

● **SEMICONDUCTOR LOCATION**

Ref.No.	Location
IC1	H-5
D11	B-7

Semiconductors Lead Layout

CXA1238S

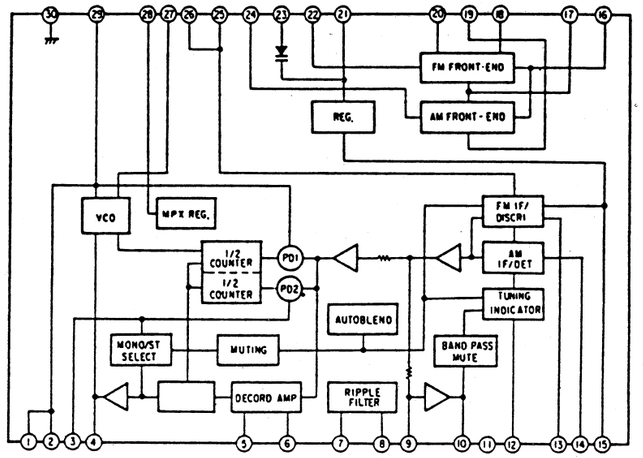


SLR-34VR70F130

Note :

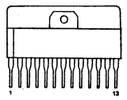
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line
- Total current is measured with no cassette installed.
- Power voltage is dc 9V and fed with regulated dc power supply from battery terminal.
- no mark : FM
  ( ) : AM
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM

● **IC BLOCK DIAGRAM**
IC1 CXA1238S

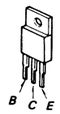


Semiconductors Lead Layout

TA4597



2SD1913SA-Q

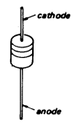


TA8149N

2SK105A-30

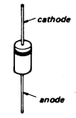
DTC114YS
DTC143TS

RD6.8ES-B2
RD8.2ES-B2
1SS119



2SA952-K2
2SD467

SLR-34VR70F130



2SC1815GR

10E2

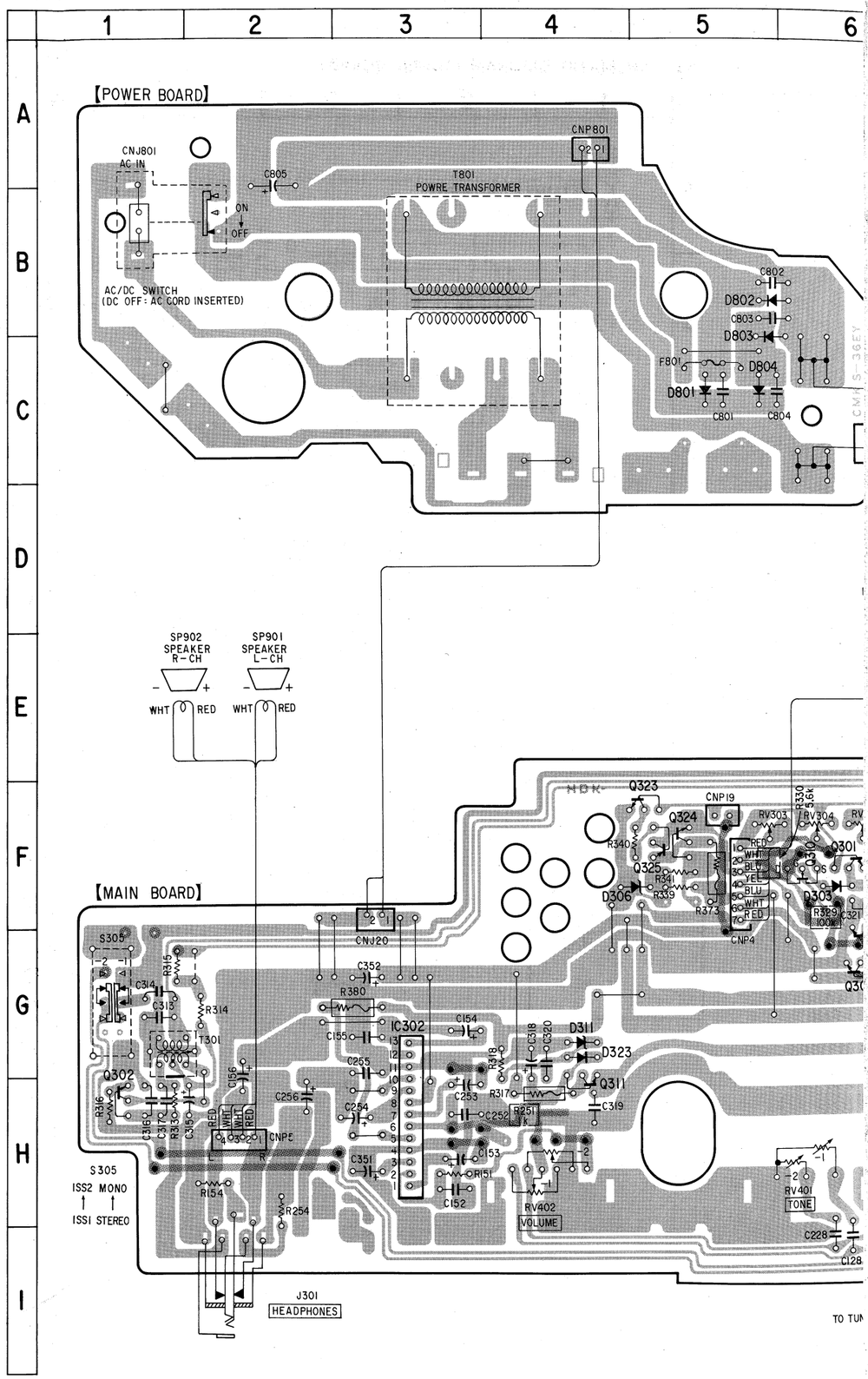
2SC2785

● SEMICONDUCTOR LOCATION

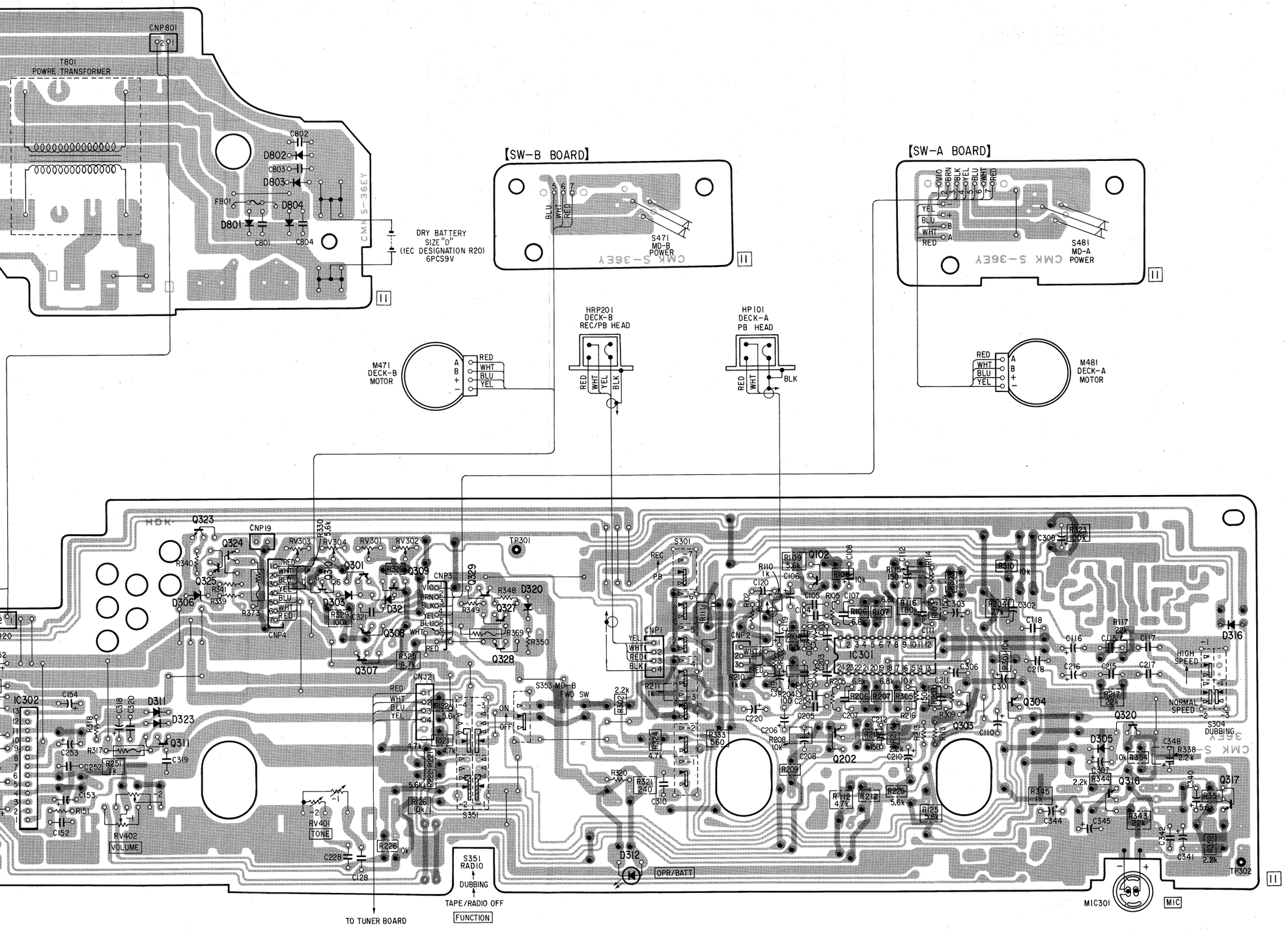
Ref.No.	Location	Ref.No.	Location
IC301	G-10	D303	F-6
IC302	G-3	D305	H-13
		D306	F-4
Q102	F-10	D311	G-4
Q202	H-10	D312	I-8
Q301	F-6		
Q302	G-1	D316	G-14
Q303	G-11	D320	F-8
		D321	F-6
Q304	G-12	D323	G-4
Q307	G-6	D801	C-5
Q308	G-6		
Q309	F-6	D802	B-5
Q310	F-5	D803	B-5
		D804	C-5
Q311	H-4		
Q316	H-13		
Q317	H-14		
Q320	G-13		
Q323	F-5		
Q324	F-5		
Q325	F-5		
Q327	F-7		
Q328	G-7		
Q329	F-7		

Note :

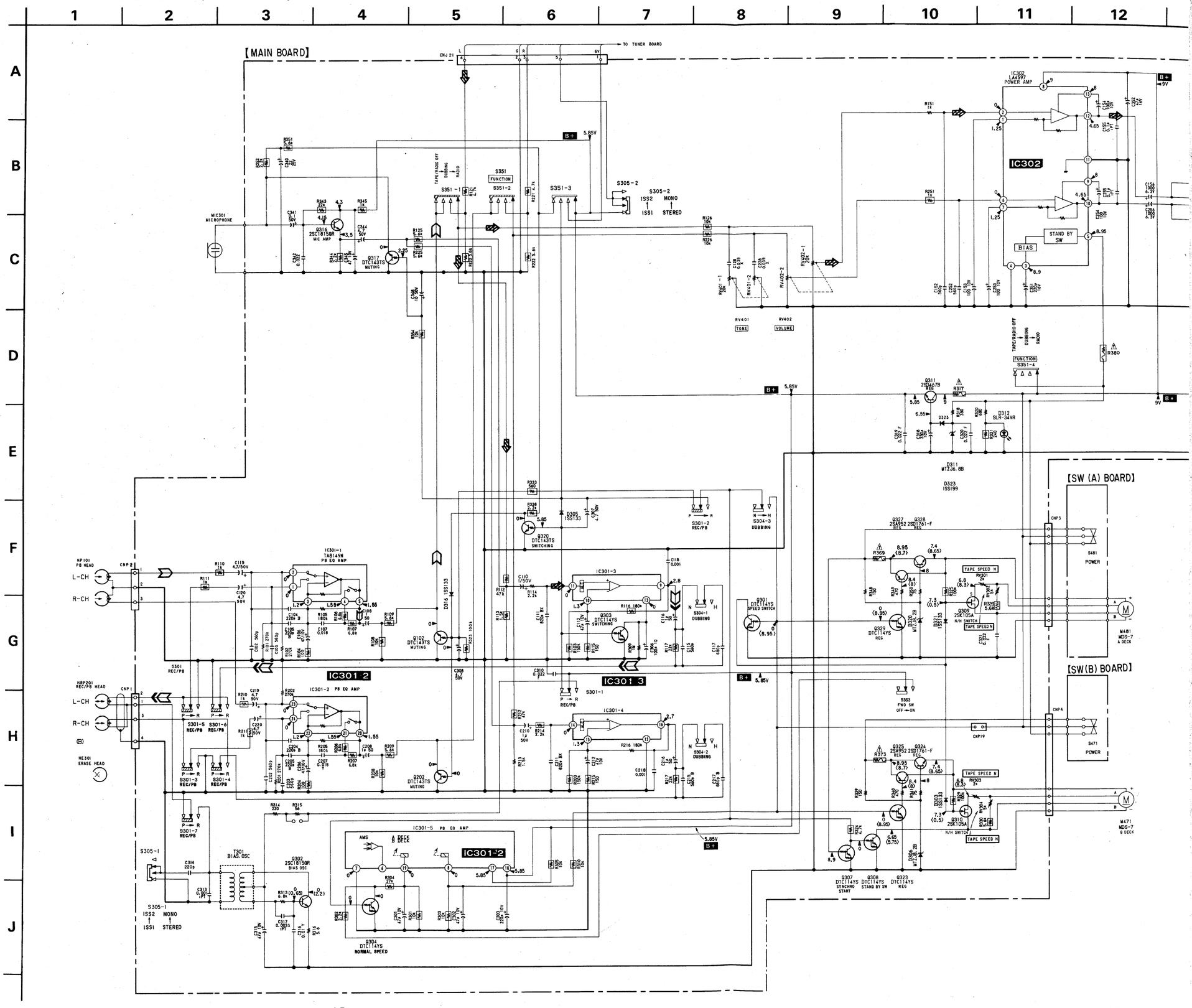
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.
- [ ] : Printed resistor.

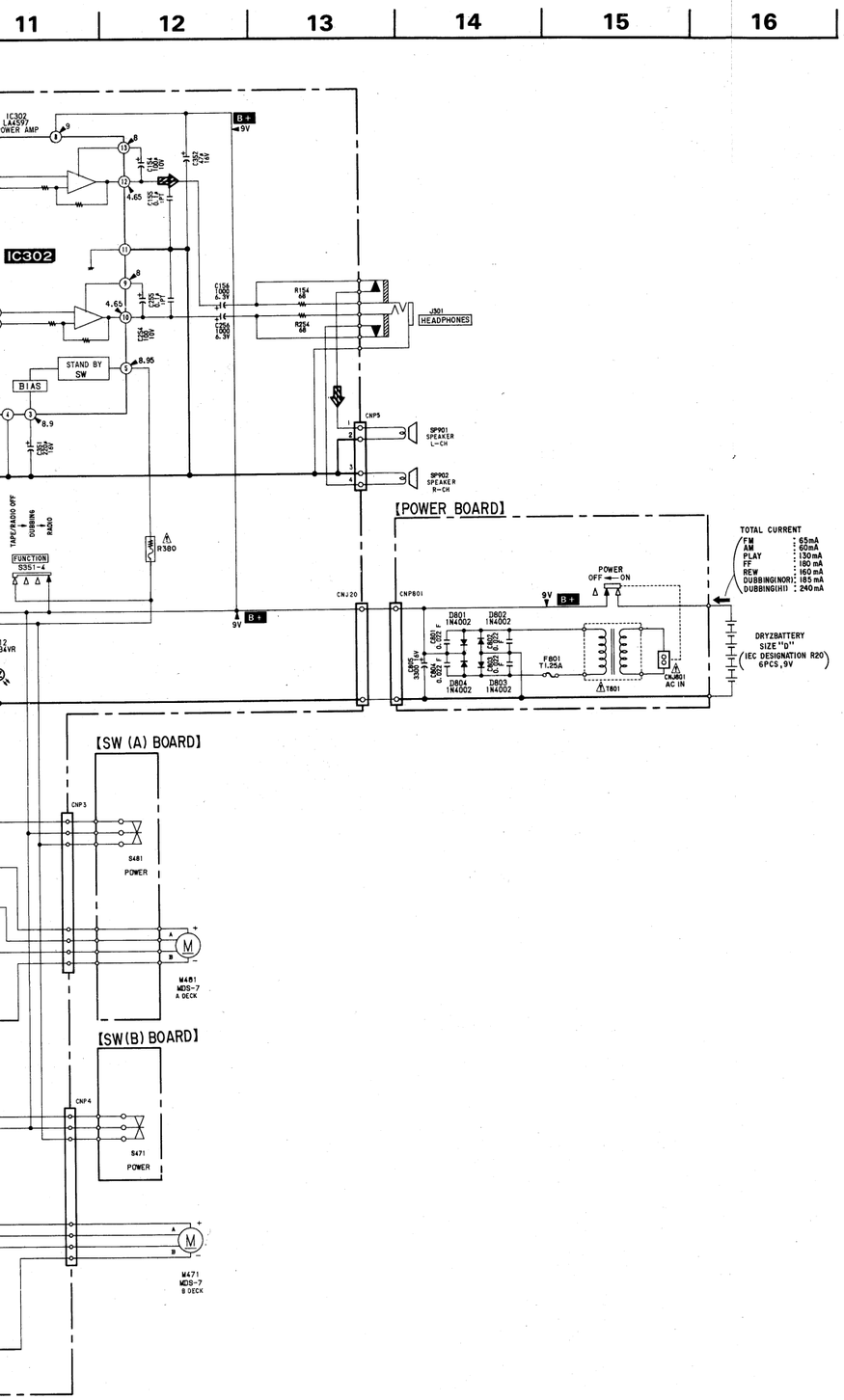


3	4	5	6	7	8	9	10	11	12	13	14



4-4. SCHEMATIC DIAGRAM (MAIN BOARD)





Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- : fusible resistor.
- : printed resistor.
- Switch with sliding contact indicated by hatched lines shows shorting type.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

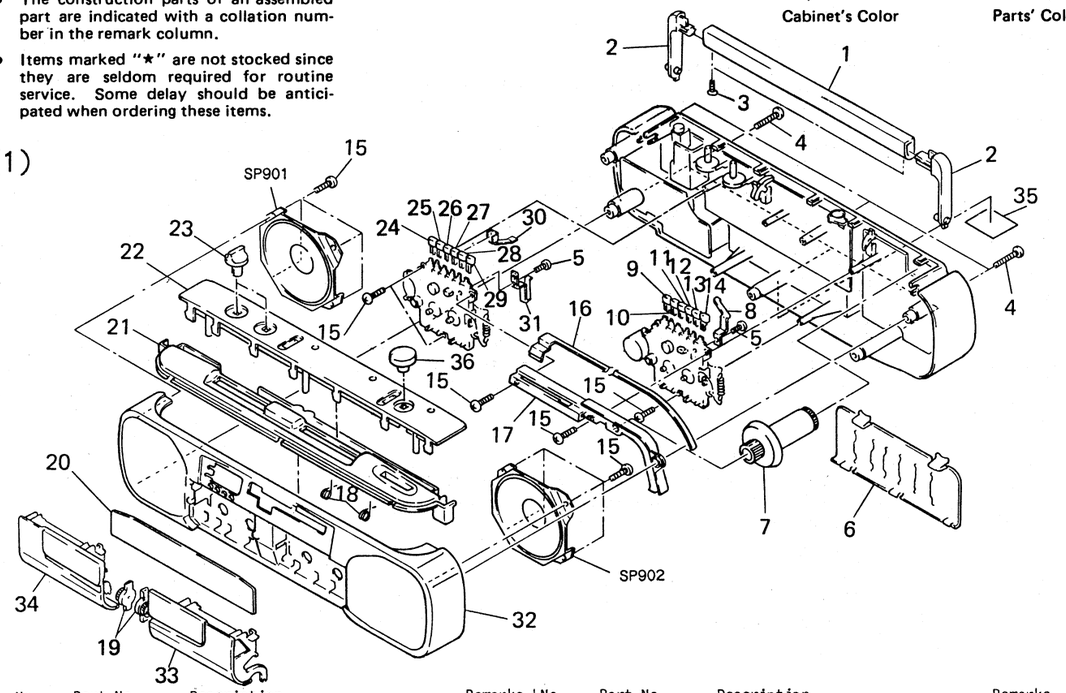
- B+ : B+ Line
- : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 9V and fed with regulated dc power supply from battery terminal.
- no mark : PLAY
  ( ) : REC
  < > : Hi-SPEED
- Voltages are taken with a VOM (Input impeadance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : FM
  : PB (DECK A)
  : REC (DECK B)

SECTION 5
EXPLODED VIEWS

NOTE:

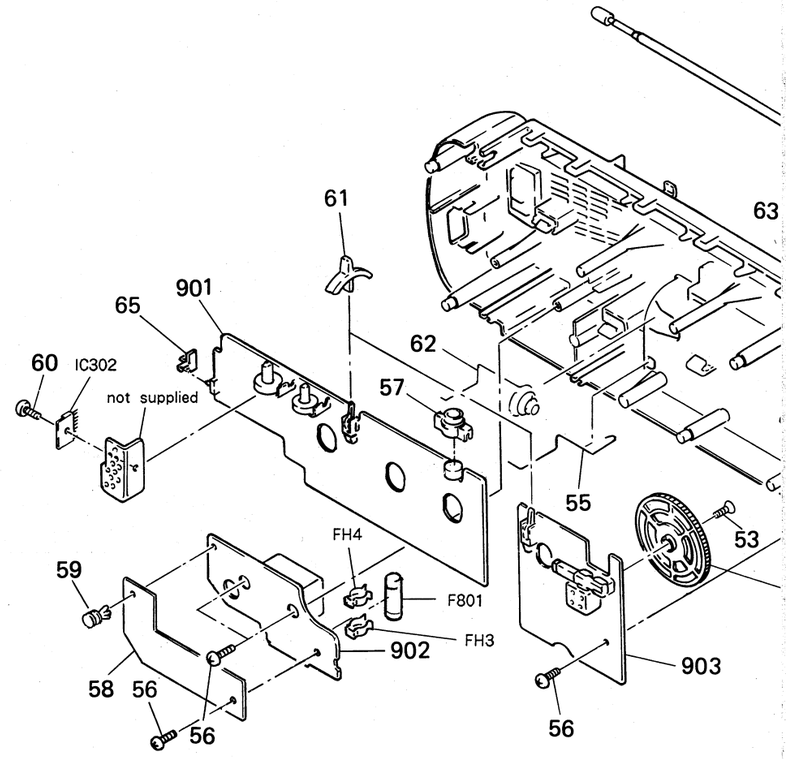
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

(1)

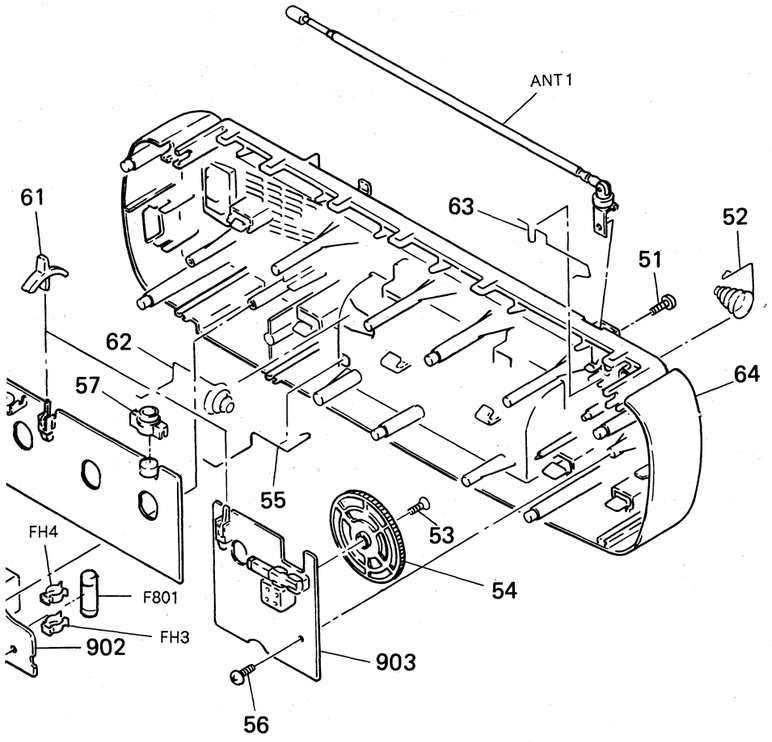


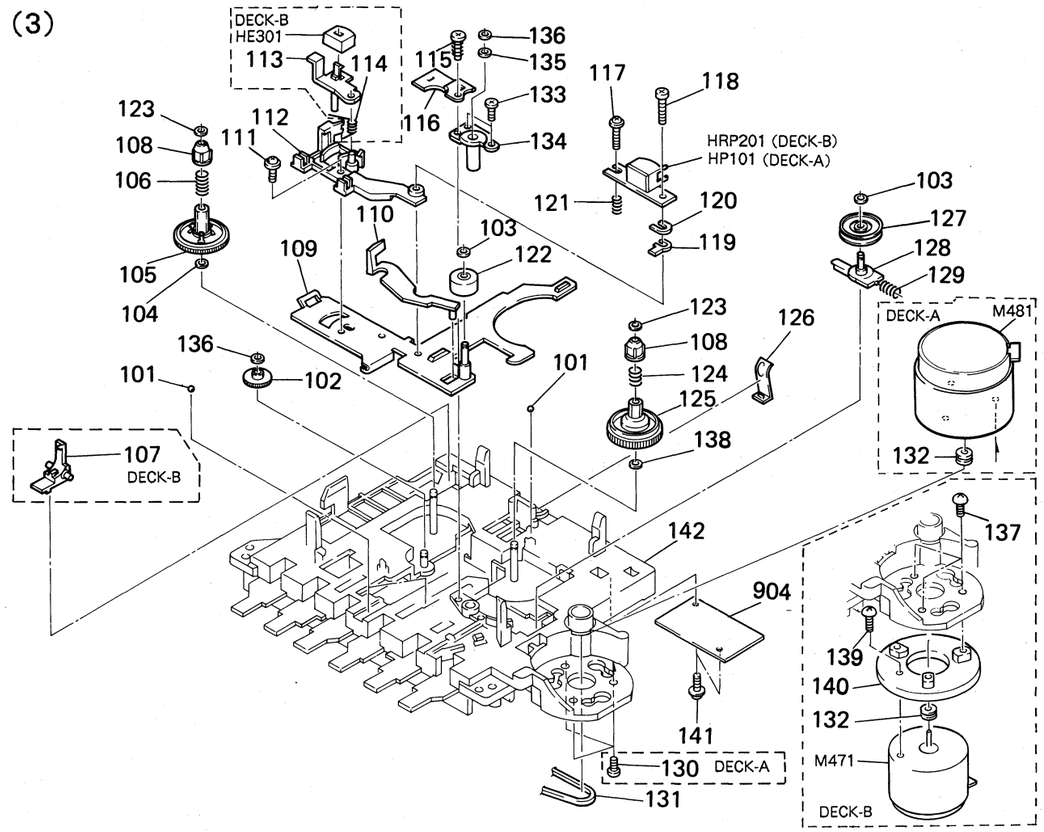
No.	Part No.	Description	Remarks
1	3-351-314-31	(BLK)...HANDLE	
	3-351-314-41	(WHT)...HANDLE	
	3-351-314-51	(RED)...HANDLE	
2	3-343-063-01	(BLK)...PLATE, SIDE, HANDLE	
	3-343-063-21	(WHT)...PLATE, SIDE, HANDLE	
	3-343-063-31	(RED)...PLATE, SIDE, HANDLE	
3	7-685-247-14	(WHT,RED)...SCREW +KTP 3X10 TYPE2 SLIT	
	7-685-247-19	(BLK).....SCREW +KTP 3X10 TYPE2 SLIT	
4	7-685-151-11	SCREW +P 3X20 TYPE2 NON-SLIT	
5	7-621-773-86	SCREW +PTT 2.6X4 (S)	
6	3-343-064-01	(BLK)...LID, BATTERY CASE	
	3-343-064-11	(WHT)...LID, BATTERY CASE	
	3-343-064-21	(RED)...LID, BATTERY CASE	
7	3-343-097-01	KNOB (TUNING)	
8	*3-343-077-01	LEVER (HI SP)	
9	3-343-085-01	BUTTON (PAUSE A)	
10	3-343-086-01	BUTTON (FF A)	
11	3-343-087-01	BUTTON (REW A)	
12	3-343-088-01	BUTTON (PLAY A)	
13	3-343-089-01	BUTTON (HI SP)	
14	3-343-090-01	BUTTON (SE A)	
15	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
16	3-343-084-01	POINTER	
17	*3-352-901-01	CHASSIS (DIAL)	
18	3-343-067-01	SPRING (CASSETTE)	
19	3-351-377-11	DAMPER	
20	3-343-083-11	(AEP,UK:BLK).....PLATE, TRANSPARENT	
	3-343-083-41	(AEP,UK:WHT,RED).....PLATE, TRANSPARENT	
	3-343-083-61	(Italian:BLK).....PLATE, TRANSPARENT	
	3-343-083-71	(Italian:WHT,RED).....PLATE, TRANSPARENT	
	3-343-083-81	(East European:BLK)...PLATE, TRANSPARENT	
	3-343-083-91	(East European:WHT,RED) ...PLATE, TRANSPARENT	
21	3-352-904-01	PANEL (MD BUTTON)	
22	3-352-905-11	(BLK)...PANEL (CONTROL)	
	3-352-905-41	(WHT)...PANEL (CONTROL)	
	3-352-905-61	(RED)...PANEL (CONTROL)	
23	3-351-338-01	(BLK)...KNOB (VOLUME)	
	3-351-338-11	(WHT)...KNOB (VOLUME)	
	3-351-338-21	(RED)...KNOB (VOLUME)	
24	3-343-091-01	BUTTON (PAUSE B)	
25	3-343-092-01	BUTTON (FF B)	
26	3-343-093-01	BUTTON (REW B)	
27	3-343-094-01	BUTTON (PLAY B)	
28	3-343-095-01	BUTTON (REC)	
29	3-343-096-01	BUTTON (SE B)	
30	*3-343-071-01	LEVER (PB)	
31	*3-343-072-01	LEVER (REC)	
32	A-3242-364-A	(BLK)...CABINET (FRONT) ASSY	
	X-3339-349-1	(WHT)...CABINET (FRONT) ASSY	
	X-3339-350-1	(RED)...CABINET (FRONT) ASSY	
33	X-3339-356-1	(BLK)...HOLDER (RIGHT) ASSY	
	X-3339-357-1	(WHT)...HOLDER (RIGHT) ASSY	
	X-3339-358-1	(RED)...HOLDER (RIGHT) ASSY	
34	X-3339-351-1	(BLK)...HOLDER (LEFT) ASSY	
	X-3339-352-1	(WHT)...HOLDER (LEFT) ASSY	
	X-3339-353-1	(RED)...HOLDER (LEFT) ASSY	
35	*3-352-973-01	(UK).....LABEL, MODEL NUMBER (UK)	
	*3-352-968-01	(East European)...LABEL, MODEL NUMBER(EE1)	
36	3-338-501-31	(BLK)...KNOB, FINE TUNE	
	3-338-501-41	(WHT)...KNOB, FINE TUNE	
	3-338-501-51	(RED)...KNOB, FINE TUNE	
SP901	1-544-154-11	SPEAKER	
SP902	1-544-154-11	SPEAKER	

(2)



No.	Part No.	Description	Remarks
51	7-682-548-04	(WHT)...SCREW +B 3X8	
	7-682-548-09	(BLK)...SCREW +B 3X8	
52	3-343-070-01	SPRING (+,-)	
53	7-687-233-11	SCREW (+ PTPWH) (2.6X6)	
54	3-338-505-01	DRUM, TUNING CAPACITOR	
55	3-343-068-01	TERMINAL, PLUS	
56	7-685-648-79	SCREW +BVTP 3X12 TYPE IT-3	
57	3-321-122-01	CUSHION, MICROPHONE	
58	*3-343-076-01	SHEET, INSULATING	
59	4-812-134-00	RIVET NYLON, 3.5	
60	7-685-870-01	SCREW +BVTT 3X5 (S)	
61	3-343-062-01	(BLK)...KNOB (FUNCTION)	
	3-343-062-11	(WHT)...KNOB (FUNCTION)	
	3-343-062-21	(RED)...KNOB (FUNCTION)	
62	3-343-069-01	SPRING (-)	
63	3-343-065-01	TERMINAL, ANTENNA	
64	3-352-902-11	(AEP,	
	3-352-902-21	(UK,E	
	3-352-902-61	(AEP,	
	3-352-902-71	(UK,E	
	3-343-066-01	(AEP,	
	3-343-066-11	(UK,E	
65	3-351-313-01	(BLK)	
	3-351-313-11	(WHT)	
	3-351-313-21	(RED)	
901	*A-3270-595-A	PC BO	
902	*1-629-539-11	PC BO	
903	*A-3266-524-A	(AEP,U	
	*A-3266-553-A	(East	
	*A-3266-549-A	(Ital	
F801	⚠1-532-285-00	FUSE,	
FH3	1-533-217-31	HOLDE	
FH4	1-533-217-31	HOLDE	
ANT1	1-501-375-11	ANTEN	



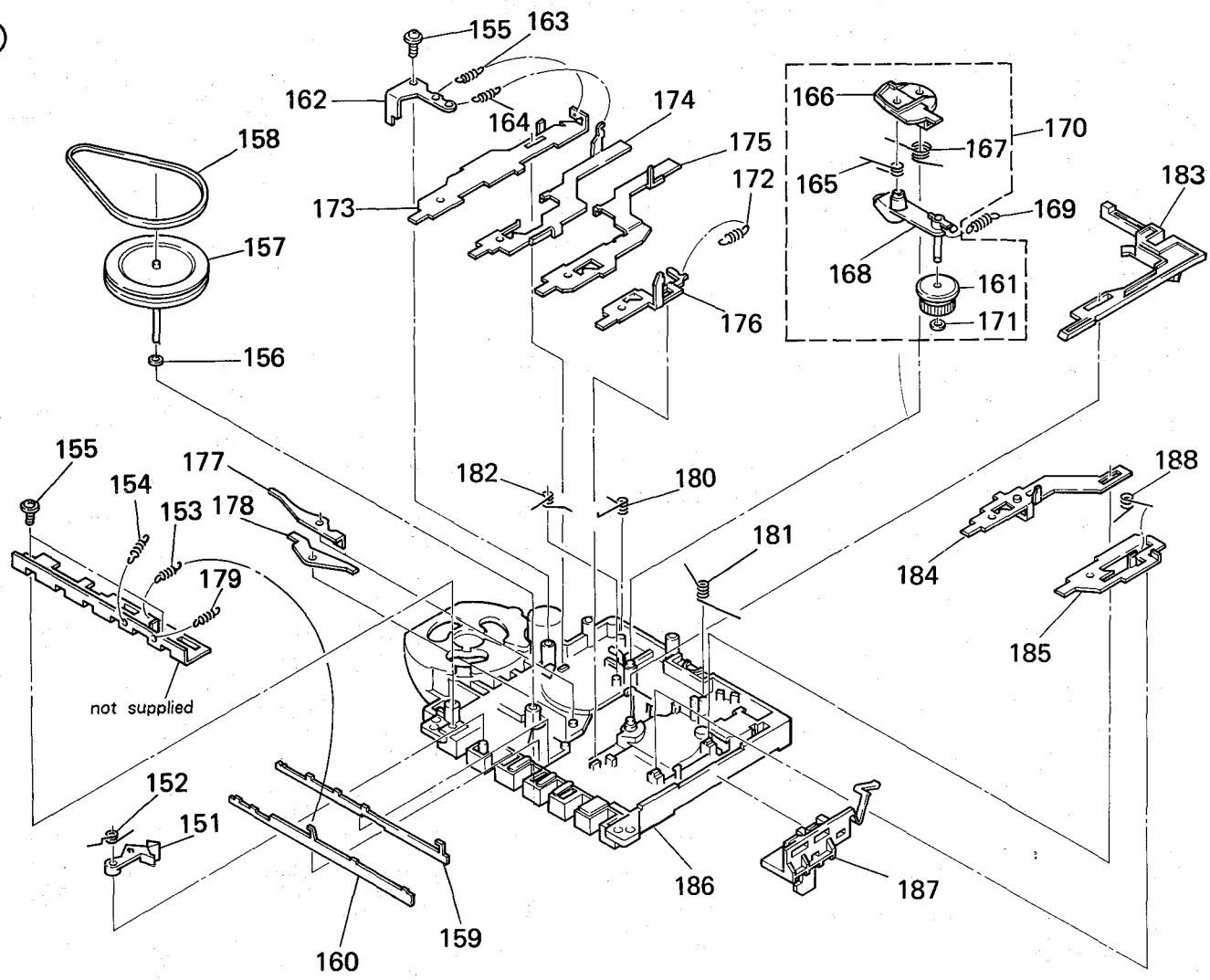


Remarks	No.	Part No.	Description	Remarks
3X8	64	3-352-902-11	(AEP,Italian:BLK).....CABINET (REAR)	
3X8		3-352-902-21	(UK,East European:BLK)...CABINET (REAR)	
		3-352-902-61	(AEP,Italian:WHT).....CABINET (REAR)	
		3-352-902-71	(UK,East European:WHT)...CABINET (REAR)	
(2.6X6)		3-343-066-01	(AEP,Italian:RED).....CABINET (REAR)	
ACITOR		3-343-066-11	(UK,East European:RED)...CABINET (REAR)	
TYPE IT-3	65	3-351-313-01	(BLK)...KNOB (ISS)	
		3-351-313-11	(WHT)...KNOB (ISS)	
ONE		3-351-313-21	(RED)...KNOB (ISS)	
G				
	901	*A-3270-595-A	PC BOARD ASSY, MAIN	
5 (S)	902	*1-629-539-11	PC BOARD, POWER	
NCTION)	903	*A-3266-524-A	(AEP,UK).....PC BOARD ASSY, TUNER	
NCTION)		*A-3266-553-A	(East European)...PC BOARD ASSY, TUNER	
NCTION)		*A-3266-549-A	(Italian).....PC BOARD ASSY, TUNER	
	F801	⚠1-532-285-00	FUSE, TIME-LAG	
A	FH3	1-533-217-31	HOLDER, FUSE	
	FH4	1-533-217-31	HOLDER, FUSE	
	ANT1	1-501-375-11	ANTENNA, TELESCOPIC	

No.	Part No.	Description	Remarks
101	7-671-112-11	BALL, STEEL	
102	3-558-620-11	GEAR, REWIND	
103	3-307-948-01	WASHER, NYLON	
104	3-322-659-01	WASHER (A)	
105	3-313-305-00	TABLE, REEL, SUPPLY	
106	3-313-344-00	SPRING, COMPRESSION	
107	3-313-357-00	(DECK B)...CLAW, REC PREVENTION	
108	3-313-333-00	CLAW, REEL	
109	X-3313-311-1	(DECK A)...CHASSIS ASSY	
	X-3313-311-1	(DECK B)...CHASSIS ASSY	
110	3-313-316-00	LEVER SHUT-OFF DETECTION	
111	7-621-255-35	SCREW (2MMX5), + PWH	
112	3-334-717-01	BRACKET (M), HEAD	
113	*3-324-221-01	(DECK B)...ARM (DC), ERASE HD	
114	3-313-339-00	(DECK B)...SPRING	
115	7-685-134-19	SCREW (B2.6), TAPPING	
116	*3-332-309-01	SPRING (B)	
117	7-621-255-55	SCREW, LOCK	
118	7-621-772-40	SCREW +B 2X8	
119	3-331-108-01	LUG (T), SHIM (t=0.1)	
	3-331-108-11	LUG (T), SHIM (t=0.2)	
	3-331-108-21	LUG (T), SHIM (t=0.3)	
	3-331-108-31	LUG (T), SHIM (t=0.4)	
	3-331-108-41	LUG (T), SHIM (t=0.5)	
120	3-578-138-01	SHIM (t=0.1)	
	3-578-138-11	SHIM (t=0.2)	
	3-578-138-21	SHIM (t=0.3)	

No.	Part No.	Description	Remarks
121	3-313-340-00	SPRING, COMPRESSION	
122	3-703-597-41	PINCH ROLLER, STANDARD	
123	3-558-708-01	WASHER, STOPPER	
124	3-313-345-00	SPRING, COMPRESSION	
125	A-3130-031-B	TABLE ASSY, REEL, TAKE-UP	
126	3-313-902-11	SPRING	
127	X-3313-307-0	PULLEY ASSY, FWD	
128	X-3313-301-0	BRACKET ASSY, T PULLEY	
129	3-573-464-00	SPRING, COMPRESSION	
130	7-621-770-87	(DECK A)...SCREW +P 2.6X5	
131	3-679-171-00	BELT	
132	X-3330-617-1	PULLEY, MOTOR	
133	3-318-203-71	SCREW (B1.7X5), TAPPING	
134	X-3319-945-1	BEARING ASSY, CAPSTAN	
135	3-701-438-01	WASHER	
136	3-307-948-41	WASHER, NYLON	
137	7-621-775-60	(DECK B)...SCREW, PAN	
138	3-701-437-21	WASHER	
139	7-621-773-86	(DECK B)...SCREW +P 2.6X4	
140	3-330-679-01	(DECK B)...BRACKET (M), MOTOR	
141	7-687-233-11	SCREW (+ PTPWH) (2.6X6)	
142	A-3102-092-A	CHASSIS ASSY, MECHANICAL	
904	1-629-540-11	(DECK A)...PC BOARD, SW (A)	
	1-629-541-11	(DECK B)...PC BOARD, SW (B)	
HE301	1-543-525-11	(DECK B)...HEAD, MAGNETIC (ERASE)	
HP101	1-543-319-11	(DECK A)...HEAD, MAGNETIC (PB)	
HRP201	1-543-319-11	(DECK B)...HEAD, MAGNETIC (REC/PB)	
M471	1-541-631-11	(DECK B)...MOTOR, DC	
M481	1-541-630-11	(DECK A)...MOTOR, DC	

(4)



No.	Part No.	Description	Remarks
151	3-313-322-02	LEVER (A), S.OFF	
152	3-313-323-00	SPRING	
153	3-313-343-00	SPRING, TENSION	
154	3-313-369-00	SPRING, TENSION	
155	7-687-233-11	SCREW (+ PTPWH) (2.6X6)	
156	3-701-438-11	WASHER, 2.5	
157	*X-3313-315-1	FLYWHEEL (G) ASSY	
158	3-679-171-00	BELT	
159	*3-313-352-11	PLATE (B), LOCK	
160	*3-313-351-16	PLATE (A), LOCK	
161	X-3313-312-1	IDLER ASSY, FR	
162	*3-332-310-01	HOOK, SPRING	
163	3-313-349-00	SPRING, TENSION	
164	3-313-348-00	SPRING, TENSION	
165	3-313-313-00	SPRING	
166	3-313-314-00	LEVER (SI), FR	
167	3-313-315-00	SPRING	
168	X-3313-304-0	ARM ASSY, REW	
169	3-313-365-00	SPRING, TENSION	

No.	Part No.	Description	Remarks
170	A-3136-041-B	IDLER COMPLETE ASSY, FR	
171	3-558-708-01	WASHER, STOPPER	
172	3-324-222-01	SPRING (HIGH TENSION), TENSION	
173	*3-313-381-01	LEVER (B), PAUSE BUTTON	
174	*3-313-353-00	LEVER, FF BUTTON	
175	*3-313-354-00	LEVER, REW BUTTON	
176	*3-313-326-00	LEVER, FWD BUTTON	
177	*3-313-320-00	LEVER, RCP	
178	*3-313-321-00	LEVER, PREVENTION, RFR	
179	3-322-529-01	SPRING, TENSION	
180	3-313-378-01	SPRING (A)	
181	3-313-327-00	SPRING	
182	3-313-338-00	SPRING	
183	3-313-356-00	BRAKE	
184	*3-313-350-00	LEVER, REC BUTTON	
185	*3-313-325-00	LEVER, STOP BUTTON	
186	A-3102-092-A	CHASSIS ASSY, MECHANICAL	
187	3-313-380-01	CLAW (A), EJECT	
188	3-313-331-00	SPRING	

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., ,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
901	*A-3270-595-A	PC BOARD ASSY, MAIN
902	*1-629-539-11	PC BOARD, POWER
903	*A-3266-524-A	(AEP,UK).....PC BOARD ASSY, TUNER
	*A-3266-553-A	(East European)...PC BOARD ASSY, TUNER
	*A-3266-549-A	(Italian).....PC BOARD ASSY, TUNER
904	*1-629-540-11	PC BOARD, SW (A)
	*1-629-541-11	PC BOARD, SW (B)
ANT1	1-501-375-11	ANTENNA, TELESCOPIC
C01	1-162-286-31	CERAMIC 220PF 10% 50V
C02	1-162-286-31	(AEP,UK,Italian) ...CERAMIC 220PF 10% 50V
C03	1-164-096-11	CERAMIC 0.01MF 50V
C04	1-123-875-11	ELECT 10MF 20% 50V
C05	1-164-096-11	CERAMIC 0.01MF 50V
C07	1-164-056-11	CERAMIC 27PF 5% 50V
C08	1-102-942-00	(East European) ...CERAMIC 5PF 0.5PF 50V
C08	1-102-961-00	(Italian)...CERAMIC 27PF 5% 50V
C08	1-102-962-00	(AEP,UK)....CERAMIC 30PF 5% 50V
C10	1-164-012-11	CERAMIC 3PF 0.25PF 50V
C11	1-164-096-11	CERAMIC 0.01MF 50V
C12	1-162-282-31	CERAMIC 100PF 10% 50V
C15	1-124-927-11	ELECT 4.7MF 20% 50V
C16	1-124-499-11	ELECT 1MF 20% 50V
C17	1-124-446-11	ELECT 47MF 20% 10V
C18	1-124-446-11	ELECT 47MF 20% 10V
C19	1-164-096-11	CERAMIC 0.01MF 50V
C20	1-124-499-11	ELECT 1MF 20% 50V
C21	1-124-925-11	ELECT 2.2MF 20% 50V
C22	1-124-443-00	ELECT 100MF 20% 10V
C23	1-124-902-00	ELECT 0.47MF 20% 50V
C24	1-124-927-11	ELECT 4.7MF 20% 50V
C25	1-124-463-00	ELECT 0.1MF 20% 50V
C27	1-162-840-11	CERAMIC 0.012MF 10% 16V
C28	1-162-840-11	CERAMIC 0.012MF 10% 16V
C29	1-124-463-00	ELECT 0.1MF 20% 50V
C30	1-124-463-00	ELECT 0.1MF 20% 50V
C32	1-102-944-00	(East European) ....CERAMIC 7PF 0.5PF 50V
C32	1-102-945-00	(AEP,UK)....CERAMIC 8PF 0.5PF 50V
C32	1-164-046-11	(Italian)...CERAMIC 10PF 0.5PF 50V
C33	1-164-064-11	CERAMIC 56PF 5% 50V
C34	1-164-096-11	CERAMIC 0.01MF 50V
C35	1-164-046-11	CERAMIC 10PF 0.5PF 50V
C36	1-102-998-00	CERAMIC 5PF 0.5PF 50V
C38	1-102-960-00	(AEP,UK,East European) ..CERAMIC 24PF 5% 50V
C38	1-102-961-00	(Italian)...CERAMIC 27PF 50V
C39	1-130-048-00	(AEP,UK,East European) ..FILM 220PF 5% 50V
C39	1-136-010-91	(Italian)...FILM 200PF 5% 50V
C40	1-136-025-91	FILM 0.0043MF 5% 50V
C41	1-130-013-00	FILM 390PF 5% 50V
C42	1-130-011-00	FILM 270PF 5% 50V
C44	1-162-282-31	CERAMIC 100PF 10% 50V
C45	1-162-282-31	CERAMIC 100PF 10% 50V
C46	1-162-282-31	CERAMIC 100PF 10% 50V
C47	1-162-282-31	CERAMIC 100PF 10% 50V
C102	1-162-291-31	CERAMIC 560PF 10% 50V
C103	1-162-291-31	CERAMIC 560PF 10% 50V
C104	1-162-286-31	CERAMIC 220PF 10% 50V
C105	1-162-286-31	CERAMIC 220PF 10% 50V
C106	1-124-446-11	ELECT 47MF 20% 10V
C107	1-162-842-11	CERAMIC 0.018MF 10% 16V
C108	1-124-499-11	ELECT 1MF 20% 50V
C110	1-124-499-11	ELECT 1MF 20% 50V
C111	1-162-293-31	CERAMIC 820PF 10% 50V
C112	1-124-446-11	ELECT 47MF 20% 10V
C115	1-162-291-31	CERAMIC 560PF 10% 50V
C116	1-124-499-11	ELECT 1MF 20% 50V
C117	1-162-292-31	CERAMIC 680PF 10% 50V
C118	1-162-294-31	CERAMIC 0.001MF 10% 50V
C119	1-124-927-11	ELECT 4.7MF 20% 50V
C120	1-124-927-11	ELECT 4.7MF 20% 50V
C128	1-161-020-11	CERAMIC 0.039MF 10% 16V
C152	1-162-291-31	CERAMIC 560PF 10% 50V
C153	1-124-443-00	ELECT 100MF 20% 10V
C154	1-124-443-00	ELECT 100MF 20% 10V
C155	1-130-495-00	MYLAR 0.1MF 5% 50V
C156	1-124-471-00	ELECT 1000MF 20% 6.3V
C202	1-162-291-31	CERAMIC 560PF 10% 50V
C203	1-162-291-31	CERAMIC 560PF 10% 50V
C204	1-162-286-31	CERAMIC 220PF 10% 50V
C205	1-162-286-31	CERAMIC 220PF 10% 50V
C206	1-124-446-11	ELECT 47MF 20% 10V
C207	1-162-842-11	CERAMIC 0.018MF 10% 16V
C208	1-124-499-11	ELECT 1MF 20% 50V
C210	1-124-499-11	ELECT 1MF 20% 50V
C211	1-162-293-31	CERAMIC 820PF 10% 50V
C212	1-124-446-11	ELECT 47MF 20% 10V

Ref.No.	Part No.	Description			
C215	1-162-291-31	CERAMIC	560PF	10%	50V
C216	1-124-499-11	ELECT	1MF	20%	50V
C217	1-162-292-31	CERAMIC	680PF	10%	50V
C218	1-162-294-31	CERAMIC	0.001MF	10%	50V
C219	1-124-927-11	ELECT	4.7MF	20%	50V
C220	1-124-927-11	ELECT	4.7MF	20%	50V
C228	1-161-020-11	CERAMIC	0.039MF	10%	16V
C252	1-162-291-31	CERAMIC	560PF	10%	50V
C253	1-124-443-00	ELECT	100MF	20%	10V
C254	1-124-443-00	ELECT	100MF	20%	10V
C255	1-130-495-00	MYLAR	0.1MF	5%	50V
C256	1-124-471-00	ELECT	1000MF	20%	6.3V
C301	1-124-446-11	ELECT	47MF	20%	10V
C302	1-124-446-11	ELECT	47MF	20%	10V
C303	1-126-176-11	ELECT	220MF	20%	10V
C306	1-124-443-00	ELECT	100MF	20%	10V
C307	1-124-927-11	ELECT	4.7MF	20%	50V
C308	1-124-927-11	ELECT	4.7MF	20%	50V
C310	1-161-494-00	CERAMIC	0.022MF		25V
C313	1-130-471-00	MYLAR	0.001MF	5%	50V
C314	1-162-286-31	CERAMIC	220PF	10%	50V
C315	1-124-446-11	ELECT	47MF	20%	10V
C316	1-161-379-00	CERAMIC	0.01MF	30%	16V
C317	1-161-327-00	CERAMIC	0.0033MF	20%	16V
C318	1-124-604-00	ELECT	330MF	20%	10V
C319	1-161-494-00	CERAMIC	0.022MF		25V
C320	1-161-494-00	CERAMIC	0.022MF		25V
C321	1-161-494-00	CERAMIC	0.022MF		25V
C340	1-126-233-11	ELECT	22MF	20%	25V
C341	1-124-463-00	ELECT	0.1MF	20%	50V
C342	1-161-494-00	CERAMIC	0.022MF		25V
C344	1-124-927-11	ELECT	4.7MF	20%	50V
C345	1-124-446-11	ELECT	47MF	20%	10V
C348	1-123-875-11	ELECT	10MF	20%	50V
C351	1-124-120-11	ELECT	220MF	20%	16V
C352	1-124-477-11	ELECT	47MF	20%	16V
C801	1-101-005-00	CERAMIC	0.022MF		50V
C802	1-101-005-00	CERAMIC	0.022MF		50V
C803	1-101-005-00	CERAMIC	0.022MF		50V
C804	1-101-005-00	CERAMIC	0.022MF		50V
C805	1-124-887-00	ELECT	3300MF	20%	16V
CF1	1-567-166-00	FILTER, CERAMIC			
CF2	1-567-670-11	FILTER, CERAMIC			
CF3	1-567-166-00	FILTER, CERAMIC			
CNJ20	*1-563-307-11	CONNECTOR (SOCKET) 2P			
CNJ801	⚠1-526-838-11	INLET, AC 2P			

Ref.No.	Part No.	Description
CNP1	*1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P
CNP2	*1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P
CNP3	*1-506-989-11	PIN, CONNECTOR (PC BOARD) 7P
CNP4	*1-506-989-11	PIN, CONNECTOR (PC BOARD) 7P
CNP5	*1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P
CNP19	*1-560-530-00	PIN, CONNECTOR 2P
CNP21	*1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P
CNP801	*1-568-259-11	PIN, CONNECTOR (PC BOARD) 2P
CT1	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CT1	1-151-644-11	(East European)....CAP, VARIABLE
CT2	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CT2	1-151-644-11	(East European)....CAP, VARIABLE
CT3	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CT3	1-151-644-11	(East European)....CAP, VARIABLE
CT4	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CT4	1-151-644-11	(East European)....CAP, VARIABLE
CT5	1-141-290-41	CAP, VAR FILM TRIMMER
CT6	1-141-290-41	CAP, VAR FILM TRIMMER
CT7	1-141-260-00	TRIMAR, CERAMIC
CT8	1-141-245-00	TRIMMER, CERAMIC
CT9	1-141-328-11	CAP, TRIMMER (FINE TUNING)
CV1	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CV1	1-151-644-11	(East European)....CAP, VARIABLE
CV2	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CV2	1-151-644-11	(East European)....CAP, VARIABLE
CV3	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CV3	1-151-644-11	(East European)....CAP, VARIABLE
CV4	1-151-637-11	(AEP,UK,Italian)...CAP, VARIABLE
CV4	1-151-644-11	(East European)....CAP, VARIABLE
D1	8-719-911-19	(AEP,UK,Italian)...DIODE 1SS119
D2	8-719-911-19	(AEP,UK,Italian)...DIODE 1SS119
D11	1-807-738-11	DIODE SLR-34VR70F130 (LED)
D303	8-719-911-19	DIODE 1SS119
D305	8-719-911-19	DIODE 1SS119
D306	8-719-110-08	DIODE RD8.2ES-B2
D311	8-719-109-97	DIODE RD6.8ES-B2
D312	1-807-738-11	DIODE SLR-34VR70F130 (LED)
D316	8-719-911-19	DIODE 1SS119
D320	8-719-110-08	DIODE RD8.2ES-B2
D321	8-719-911-19	DIODE 1SS119
D323	8-719-911-19	DIODE 1SS119
D801	8-719-200-02	DIODE 10E-2
D802	8-719-200-02	DIODE 10E-2
D803	8-719-200-02	DIODE 10E-2
D804	8-719-200-02	DIODE 10E-2

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
F801	⚠1-532-285-00	FUSE, TIME-LAG
FH3	1-533-217-31	HOLDER, FUSE
FH4	1-533-217-31	HOLDER, FUSE
FL1	1-236-022-11	FILTER, BAND PASS
IC1	8-752-035-68	IC CXA1238S
IC301	8-759-231-77	IC TA8149N
IC302	8-759-820-22	IC LA4597
J301	1-568-267-11	JACK
KH1	*1-565-386-11	HOLDER, CABLE 5P
KH471	*1-565-384-11	HOLDER, CABLE 3P
L1	*1-422-180-11	(AEP,UK,Italian)...COIL, AIR-CORE (RF)
L1	1-428-045-11	(East European)....COIL, AIR-CORE (RF)
L2	1-459-970-11	(East European)....COIL (WITH CORE)
L2	1-459-815-11	(AEP,UK,Italian)...COIL (WITH CORE)
L3	1-402-417-11	ANTENNA, FERRITE-ROD (LW/MW)
L4	1-406-253-11	COIL (OSC)
L5	1-402-312-11	COIL (ANT)
L6	1-406-280-11	COIL (OSC)
L7	1-402-417-11	ANTENNA, FERRITE-ROD (LW/MW)
L8	1-406-252-11	COIL (OSC)
L9	*1-409-293-00	COIL, AIR CORE
Q1	8-729-904-36	TRANSISTOR DTC114YS
Q102	8-729-900-74	TRANSISTOR DTC143TS
Q202	8-729-900-74	TRANSISTOR DTC143TS
Q301	8-729-904-36	TRANSISTOR DTC114YS
Q302	8-729-281-53	TRANSISTOR 2SC1815GR
Q303	8-729-904-36	TRANSISTOR DTC114YS
Q304	8-729-904-36	TRANSISTOR DTC114YS
Q307	8-729-904-36	TRANSISTOR DTC114YS
Q308	8-729-904-36	TRANSISTOR DTC114YS
Q309	8-729-115-30	TRANSISTOR 2SK105A-30
Q310	8-729-115-30	TRANSISTOR 2SK105A-30
Q311	1-808-454-21	TRANSISTOR 2SD467
Q316	8-729-119-78	TRANSISTOR 2SC27485
Q317	8-729-900-74	TRANSISTOR DTC143TS
Q320	8-729-900-74	TRANSISTOR DTC143TS
Q323	8-729-904-36	TRANSISTOR DTC114YS
Q324	8-729-808-76	TRANSISTOR 2SD1913SA-Q
Q325	8-719-195-23	TRANSISTOR 2SA952K2
Q327	8-719-195-23	TRANSISTOR 2SA952K2
Q328	8-729-808-76	TRANSISTOR 2SD1913SA-Q
Q329	8-729-904-36	TRANSISTOR DTC114YS

Ref.No.	Part No.	Description			
R03	1-249-421-11	CARBON	2.2K	5%	1/4W
R05	1-249-423-11	CARBON	3.3K	5%	1/4W
R06	1-249-441-11	CARBON	100K	5%	1/4W
R07	1-249-415-11	CARBON	680	5%	1/4W
R09	1-249-441-11	CARBON	100K	5%	1/4W
R10	1-249-407-11	CARBON	150	5%	1/4W
R11	1-249-427-11	CARBON	6.8K	5%	1/4W
R12	1-249-427-11	CARBON	6.8K	5%	1/4W
R13	1-249-405-11	CARBON	100	5%	1/4W
R14	1-249-429-11	CARBON	10K	5%	1/4W
R15	1-247-887-00	CARBON	220K	5%	1/4W
R16	1-247-887-00	CARBON	220K	5%	1/4W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W
R19	1-249-416-11	CARBON	820	5%	1/4W
R20	1-249-423-11	CARBON	3.3K	5%	1/4W
R22	1-249-411-11	CARBON	330	5%	1/4W
R23	1-249-429-11	CARBON	10K	5%	1/4W
R24	1-249-413-11	(AEP,UK,Italian) ...CARBON	470	5%	1/4W
R101	1-215-479-00	CARBON	270K	5%	1/4W
R102	1-215-479-00	CARBON	270K	5%	1/4W
•R103	1-215-473-00	CARBON	150K	10%	1/4W
•R104	1-249-405-11	CARBON	100	10%	1/4W
R105	1-247-885-00	CARBON	180K	5%	1/4W
•R106	1-249-427-11	CARBON	6.8K	10%	1/4W
•R107	1-249-427-11	CARBON	6.8K	10%	1/4W
•R108	1-249-429-11	CARBON	10K	10%	1/4W
•R109	1-249-426-11	CARBON	5.6K	10%	1/4W
•R110	1-249-417-11	CARBON	1K	10%	1/4W
•R111	1-249-417-11	CARBON	1K	10%	1/4W
•R112	1-249-437-11	CARBON	47K	10%	1/4W
R113	1-249-419-11	CARBON	1.5K	10%	1/4W
R114	1-249-421-11	CARBON	2.2K	5%	1/4W
•R115	1-249-407-11	CARBON	150	10%	1/4W
•R116	1-247-885-00	CARBON	180K	10%	1/4W
•R117	1-249-433-11	CARBON	22K	10%	1/4W
•R121	1-249-425-11	CARBON	4.7K	10%	1/4W
•R122	1-249-426-11	CARBON	5.6K	10%	1/4W
•R125	1-249-426-11	CARBON	5.6K	10%	1/4W
•R126	1-249-429-11	CARBON	10K	10%	1/4W
•R151	1-249-417-11	CARBON	1K	5%	1/4W
R154	1-249-403-11	CARBON	68	5%	1/4W
R201	1-215-479-00	CARBON	270K	5%	1/4W
R202	1-215-479-00	CARBON	270K	5%	1/4W
•R203	1-215-473-00	CARBON	150K	10%	1/4W
•R204	1-249-405-11	CARBON	100	10%	1/4W

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Ref.No.	Part No.	Description				
R205	1-247-885-00	CARBON	180K	5%	1/4W	
•R206	1-249-427-11	CARBON	6.8K	10%	1/4W	
•R207	1-249-427-11	CARBON	6.8K	10%	1/4W	
•R208	1-249-429-11	CARBON	10K	10%	1/4W	
•R209	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R210	1-249-417-11	CARBON	1K	10%	1/4W	
•R211	1-249-417-11	CARBON	1K	10%	1/4W	
•R212	1-249-437-11	CARBON	47K	10%	1/4W	
R213	1-249-419-11	CARBON	1.5K	5%	1/4W	
•R214	1-249-421-11	CARBON	2.2K	10%	1/4W	
•R215	1-249-407-11	CARBON	150	10%	1/4W	
R216	1-247-885-00	CARBON	180K	5%	1/4W	
•R217	1-249-433-11	CARBON	22K	10%	1/4W	
•R221	1-249-425-11	CARBON	4.7K	10%	1/4W	
•R222	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R225	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R226	1-249-429-11	CARBON	10K	10%	1/4W	
•R251	1-249-417-11	CARBON	1K	10%	1/4W	
R254	1-249-403-11	CARBON	68	5%	1/4W	
•R301	1-249-429-11	CARBON	10K	10%	1/4W	
•R302	1-249-421-11	CARBON	2.2K	10%	1/4W	
•R303	1-249-429-11	CARBON	10K	10%	1/4W	
•R304	1-249-434-11	CARBON	27K	10%	1/4W	
•R305	1-249-429-11	CARBON	10K	10%	1/4W	
R309	1-247-903-00	CARBON	1M	5%	1/4W	
•R310	1-249-429-11	CARBON	10K	10%	1/4W	
R313	1-249-427-11	CARBON	6.8K	5%	1/4W	
R314	1-249-409-11	CARBON	220	5%	1/4W	
R315	1-249-402-11	CARBON	56	5%	1/4W	
R316	1-249-390-11	CARBON	5.6	5%	1/4W	
R317 ⚠	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R318	1-249-411-11	CARBON	330	5%	1/4W	
R320	1-249-415-11	CARBON	680	5%	1/4W	
•R321	1-215-406-00	CARBON	240	10%	1/4W	
•R323	1-249-441-11	CARBON	100K	10%	1/4W	
•R324	1-249-425-11	CARBON	4.7K	10%	1/4W	
•R325	1-249-441-11	CARBON	100K	10%	1/4W	
•R326	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R329	1-249-441-11	CARBON	100K	10%	1/4W	
•R330	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R333	1-249-414-11	CARBON	560	10%	1/4W	
•R338	1-249-421-11	CARBON	2.2K	10%	1/4W	
R339	1-249-407-11	CARBON	150	5%	1/4W	
R340	1-249-413-11	CARBON	470	5%	1/4W	
R341	1-247-804-11	CARBON	75	5%	1/4W	

Ref.No.	Part No.	Description				
•R343	1-249-433-11	CARBON	22K	10%	1/4W	
•R344	1-249-421-11	CARBON	2.2K	10%	1/4W	
•R345	1-249-417-11	CARBON	1K	10%	1/4W	
R348	1-249-407-11	CARBON	150	5%	1/4W	
R349	1-249-413-11	CARBON	470	5%	1/4W	
R350	1-247-804-11	CARBON	75	5%	1/4W	
•R351	1-249-426-11	CARBON	5.6K	10%	1/4W	
•R352	1-249-421-11	CARBON	2.2K	10%	1/4W	
•R354	1-249-429-11	CARBON	10K	10%	1/4W	
R369 ⚠	1-217-638-00	FUSIBLE	1.5	5%	1/4W	F
R373 ⚠	1-217-638-00	FUSIBLE	1.5	5%	1/4W	F
R380 ⚠	1-217-640-11	FUSIBLE	3.3	5%	1/4W	F

RV1	1-228-995-00	RES, ADJ, CARBON 22K (VCO)
RV301	1-230-719-11	RES, ADJ, CARBON 2K(TAPE SPEED A-NOR)
RV302	1-230-720-11	RES, ADJ, CARBON 5K(TAPE SPEED A-HIGH)
RV303	1-230-719-11	RES, ADJ, CARBON 2K(TAPE SPEED B-NOR)
RV304	1-230-720-11	RES, ADJ, CARBON 5K(TAPE SPEED B-HIGH)
RV401	1-238-431-11	RES, VAR, CARBON 20K/20K (TONE)
RV402	1-238-430-11	RES, VAR, CARBON 20K/20K (VOLUME)
S1	1-571-147-11	SWITCH, LEVER SLIDE (BAND)
S301	1-571-876-11	SWITCH, SLIDE (PB/REC)
S304	1-571-472-11	SWITCH, SLIDE (DUBBING HIGH/NOMAL)
S305	1-571-547-11	SWITCH, SLIDE (FM MODE/ISS)
S351	1-571-833-11	SWITCH, LEVER SLIDE(FUNCTION)
S353	1-571-831-11	SWITCH, PUSH (1 KEY)(MD-B FWD)
S471	1-554-495-00	SWITCH, LEAF (MD-B POWER)
S481	1-554-495-00	SWITCH, LEAF (MD-A POWER)
SP901	1-544-154-11	SPEAKER
SP902	1-544-154-11	SPEAKER
T1	1-404-355-00	TRANSFORMER, IF (AM)
T301	1-433-346-11	TRANSFORMER, BIAS OSCILLATION
T801 ⚠	1-449-541-11	(AEP,Italian,East European) ...TRANSFORMER, POWER
T801 ⚠	1-449-538-11	(UK).....TRANSFORMER, POWER

ACCESSORY & PACKING MATERIAL

⚠	1-555-234-00	(AEP,Italian,East European)..CORD, POWER
⚠	1-558-032-11	(UK).....CORD, POWER
*3	352-938-01	CUSHION (LEFT) (RIGHT)
3	750-179-61	(East European)....MANUAL, INSTRUCTION
3	750-179-11	(AEP,UK,Italian)...MANUAL, INSTRUCTION
3	750-179-41	(AEP,Italian).....MANUAL, INSTRUCTION
*3	352-944-01	INDIVIDUAL CARTON
3	701-631-00	BAG, POLYETHYLENE

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